

# A METHOD AND SYSTEM FOR ASSESSING THE QUALITY AND COST OF INSPECTION

## ABSTRACT

A method, system, and software for assessing the cost tradeoffs associated with performing inspection includes determining measurement variations and product characteristic variations to define an inspection plane. The inspection plane is divided into a plurality of regions corresponding to respective different outcomes resulting from an inspection process. The probability of each outcome is determined based on a probability mass in each region of the inspection plane, wherein the probability mass is based on a joint probability density of the measurement and product characteristic variations. Costs are associated to various outcomes based on the inspection process, and overall costs of the inspection process are computed by using the associated costs and the determined probability of each outcome based on the regions of the inspection plane.

## Figures

1. The first figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.

2. The second figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.

3. The third figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.

4. The fourth figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.

5. The fifth figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.

6. The sixth figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.

7. The seventh figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.

8. The eighth figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.

9. The ninth figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.

10. The tenth figure is a line graph showing the relationship between the number of people in a family and the number of people in a household. The x-axis is labeled 'Number of people in a family' and the y-axis is labeled 'Number of people in a household'. The graph shows a positive correlation between the two variables.